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Reissue Patent Application
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Dan S. Bloomberg et al.	)	
	)	Group No.: Not assigned
reissue Application for US Patent. No. 6,076,738	)	
	)	Examiner: Not assigned
Issued: June 20, 2000	)	
	)	
For: SELF CLOCKING GLYPH CODES	)	

Commissioner for Patents
Washington, D.C. 20231

STATUS AND SUPPORT FOR NEW CLAIMS - 37 CFR 1.173(c)

Sir:

Claims 1-8 are the original issued claims in US Patent 6,076,738. No changes are being made to claims 1-8. New claims 9-28 are being added in this reissue application. For the Examiner's convenience all claims are shown below.

1. A method for storing digital values of predetermined bit length, n, in a machine readable format on a hardcopy recording medium, said method comprising the steps of:

encoding each of said digital values in a corresponding one of 2^n physically distinct, distinctive, rotationally variant, substantially equal surface area, individually discriminable glyph shapes to generate a set of mutually independent glyph shapes that vary in accordance with said digital values; and

writing said set of glyph shapes on said recording medium in a predetermined logical order and in accordance with a predetermined spatial formatting pattern for storing said digital values in a self-clocking code.

2. The method of claim 1 wherein said digital values are single bit values, and

said glyph shapes are elongated along axes that are tilted at angles of approximately plus and minus 45° with respect to a reference axis for distinguishing different ones of said digital values from each other.

3. The method of claim 2 wherein said reference axis extends substantially horizontally with respect to said recording medium.

4. A method for storing digital values of predetermined bit length, n, in a machine readable format on a hardcopy recording medium, said method comprising the steps of:

encoding each of said digital values in a corresponding one of 2^n physically distinct, distinctive, rotationally invariant, substantially equal surface area, individually discriminable glyph shapes to generate a set of mutually independent glyph shapes that vary in accordance with said digital values; and

writing said set of glyph shapes on said recording medium in a predetermined logical order and in accordance with a predetermined spatial formatting pattern for storing said digital values in a self-clocking code.

5. The method of any of claims 1-4 wherein said glyph shapes are defined by respective two dimensional pixel arrays of predetermined size, each of which contains a predetermined number of ON pixels and a predetermined number of OFF pixels, and said spatial pattern is spatially periodic.

6. The method of claim 5 wherein said pixel arrays are written on said recording medium in spatially abutting relationship, such that said code has a generally uniform, textured appearance.

7. The method of any of claims 1-4 wherein said glyph shapes are of substantially uniform macroscopic appearance, and said spatial pattern is spatially periodic.

8. The method of claim 7 wherein said glyph shapes are written on said recording medium at a sufficiently high spatial density to impart a generally uniform, textured appearance to said code.

9. (New) A method for storing digital values of predetermined bit length, n, in a machine readable format on a hardcopy recording medium, said method comprising:

encoding each of said digital values in a corresponding one of 2^n physically distinct, distinctive, substantially equal surface area, individually discriminable glyph shapes to generate a set of mutually independent glyph shapes that vary in accordance with said digital values; and

writing said set of glyph shapes on said recording medium in a predetermined logical order and in accordance with a predetermined spatial formatting pattern for storing said digital values in a self-clocking code.

10. (New) The method of claim 9, wherein said glyph shapes are defined by respective two dimensional pixel arrays of predetermined size, each of which contains a predetermined number of ON pixels and a predetermined number of OFF pixels, and said spatial pattern is spatially periodic.

11. (New) The method of claim 10, wherein said pixel arrays are written on said recording medium in spatially abutting relationship, such that said code has a generally uniform, textured appearance.

12. (New) The method of claim 9, wherein said glyph shapes are of substantially uniform macroscopic appearance, and said spatial pattern is spatially periodic.

13. (New) The method of claim 12, wherein said glyph shapes are written on said recording medium at a sufficiently high spatial density to impart a generally uniform, textured appearance to said code.

14. (New) The method of claim 13, wherein said glyph shapes are of substantially uniform macroscopic appearance, and said spatial pattern is spatially periodic.

15. (New) A method for storing digital values of predetermined bit length, n, in a machine readable format on a hardcopy recording medium, said method comprising:

providing a hardcopy record, said hardcopy recording medium being encoded with a self-clocking code composed of spatially distributed glyphs that are written on said recording medium in a predetermined logical order in accordance with a predetermined spatial pattern for encoding digital values of predetermined bit length, n, in the respective glyphs, said glyphs conforming to selected ones of 2^n physically distinct, distinctive, substantially equal surface area, individually discriminable glyph shapes; and

copying said machine readable code on said hardcopy recording medium onto another hardcopy recording medium.

16. (New) The method of claim 15, wherein said glyph shapes are rotationally variant.

17. (New) The method of claim 15, wherein said glyph shapes are rotationally invariant.

18. (New) The method of claim 15, wherein said glyph shapes are defined by respective two dimensional pixel arrays of predetermined size, each of which contains a predetermined number of ON pixels and a predetermined number of OFF pixels, and said spatial pattern is spatially periodic.

19. (New) The method of claim 18, wherein said pixel arrays are written on said recording medium in spatially abutting relationship, such that said code has a generally uniform, textured appearance.

20. (New) The method of claim 15, wherein said glyph shapes are of substantially uniform macroscopic appearance, and said spatial pattern is spatially periodic.

21. (New) The method of claim 20, wherein said glyph shapes are written on said recording medium at a sufficiently high spatial density to impart a generally uniform, textured appearance to said code.

22. (New) A glyph code reader, comprising:

a scanner for scanning images on a hardcopy recording medium; and

a processor for isolating a glyph code image from the scanned images, said glyph code image comprising glyph shapes storing digital values of predetermined bit length, n, in a machine readable format, in a self-clocking code, said glyph shapes being written on said recording medium in a predetermined logical order and in accordance with a predetermined spatial formatting pattern, each of said digital values being encoded in a corresponding one of 2^n physically distinct, distinctive, substantially equal surface area, individually discriminable glyph shapes to generate a set of mutually independent glyph shapes that vary in accordance with said digital values, and for converting the glyph shapes into the digital values.

23. (New) The reader of claim 22, wherein said glyph shapes are rotationally variant.

24. (New) The reader of claim 22, wherein said glyph shapes are rotationally invariant.

25. (New) The reader of claim 22, wherein said glyph shapes are defined by respective two dimensional pixel arrays of predetermined size, each of which contains a predetermined number of ON pixels and a predetermined number of OFF pixels, and said spatial pattern is spatially periodic.

26. (New) The reader of claim 25, wherein said pixel arrays are written on said recording medium in spatially abutting relationship, such that said code has a generally uniform, textured appearance.

27. (New) The reader of claim 22, wherein said glyph shapes are of substantially uniform macroscopic appearance, and said spatial pattern is spatially periodic.

28. (New) The reader of claim 27, wherein said glyph shapes are written on said recording medium at a sufficiently high spatial density to impart a generally uniform, textured appearance to said code.